Source: Finnish Medical Society Duodecim. Palliative treatment of cancer. Helsinki, Finland: Duodecim Medical Publications Ltd.; 2001 Dec 27.

Palliative treatment of cancer

EBMG
27.12.2001

Contents

The guideline has been extensively revised

Aims

- The duration of palliative treatment for cancer ranges from months and years to a few days. Treatment of the cancer with antineoplastic agents, hormone therapy or radiotherapy may alleviate pain efficiently. Care and alleviation of pain (See related EBM Guideline: **Pharmacological treatment of cancer pain** available on the EBM Web site) are central in the treatment of a dying patient. The aim is to find therapies that alleviate symptoms with benefits to the patient at this stage of the disease that outweigh the adverse effects. The treatment alternatives given in this article should be considered from this perspective.
- Discuss treatment alternatives with the patient. Explain the probable aetiology of the symptoms, engage family members in the treatment, and consult with specialists.

Respiratory symptoms

Cough: causes and treatment alternatives

- Heart failure, asthma, COPD: treatment according to the disease.
- Infection: antibiotic, antipyretic.
- Radiation pneumonitis may appear (1-) 3 months from radiation of the lungs. It is seen as an opacity with the shape of the irradiation field on the chest radiograph. Fever may be present and CRP may be elevated.
    - Rest
    - Prednisolone 40 - 60 mg x 1 or dexamethasone 6 - 9 mg x 1 with dose tapering
    - Antitussive (see below), antibiotic if infection concurs.
- Lung metastases, tumour-induced irritation of the pharynx and the airways
    - Prednisolone 40 - 60 mg x 1 or dexamethasone 6 - 9 mg x 1 with dose tapering
    - Radiation therapy
    - Antitussive medication, see below.
- Pleural effusion
    - Aspiration ± sclerotherapy
    - Prednisolone 40 - 60 mg x 1 or dexamethasone 6 - 9 mg x 1 with dose tapering
    - Antitussive medication, see below.
- Haemoptysis
    - Tranexame acid 1000 - 1500 mg x 3
    - Dexamethasone 3 - 10 mg x 1 with decreasing doses
    - Radiation therapy
- Productive cough/mucus secretion
    - Infection: antibiotics
    - Pain prevents the patient from coughing productively, coughing is difficult when the patient is lying ->
        - Position therapy
        - Patting
        - Breathing into a bottle
    - Humidification of the air, mucolytes (e.g. bromhexine 8 mg x 3)
    - If the patient is too weak to cough
        - Antitussive, see below
        - Aspiration of mucus from the airways is seldom necessary and it is unpleasant for a conscious patient.
        - Anticholinergics, e.g. glycopyrrolate 0.2 mg x 1-6 or 0.6-1.2 mg/daily as a continuous s.c. infusion decreases mucus production in the airways but also dries the mouth.
- Antitussive medication
    - Opioids, e.g.
        - paracetamol 500 mg + codeine 30 mg 1 - 2 doses x 3-4/day
        - ibuprofein 200 mg + codeine 30 mg 1 - 2 doses x 3-4/day
        - morphine solution with a starting dose of 12 - 20 mg x 1 - 6
        - long-acting morphine with a starting dose of 10 - 30 mg x 2
- Pulmonary aspiration (pharyngeal palsy, obstructing tumour)
    - Pharyngeal palsy: eating in the sitting position with the chin pointed downwards
    - Food is made thicker (e.g. Thick and Easy)
    - Radiation of the obstructive tumour, laser therapy or bypassing by using a stent

Dyspnoea; causes and treatment alternatives

- Heart failure, asthma, COPD: treatment depends on the disease
- Pulmonary embolism: anticoagulant therapy
- Pneumonia: antibiotics
- Anaemia: red cell transfusion
- Fever: antipyretics.
- Partial pulmonectomy, lung fibrosis: symptomatic therapy
- Radiation or drug-induced pneumonitis
    - Rest
    - Prednisolone 40 - 80 mg x 1 or dexamethasone 6 - 12 mg x 1 with dose tapering
- Tumour-induced causes of dyspnoea in the neck and thorax
    - Compression of the trachea, bronchi or the vena cava superior, atelectasis, lung metastases, lymphangitis carcinomatosa:
        - dexamethasone 3 - 10 mg x 1 - 3 with dose tapering
        - radiotherapy
    - Pleural effusion
        - Aspiration, sclerotherapy, steroids
- Ascites, enlarged liver or large abdominal tumour:
    - Ascites puncture, diuretics
    - Elevation of the upper body
    - Prednisolone 40 - 60 mg x 1 or dexamethasone 6 - 9 mg x 1 with dose tapering
- Pharmacotherapy for dyspnoea
    - If obstruction is associated
        - Inhaled bronchodilatator
        - Teophylline mixture brings often subjective relief.
    - Prednisolone 20 - 80 mg x 1 or dexamethasone 3 - 10 mg 1-3 with dose tapering
    - Opioids are effective for dyspnoea (Level of evidence = A; Evidence Summary available on the EBM Web site).
        - Starting dose with a morphine solution 12 - 20 mg x 1 - 6, 1 - 2 doses readily available, for example, on the bedside table
        - Starting dose with a long-acting morphine 10 - 30 mg x 2
        - Dose is increased by 20 - 30%
    - Benzodiazepines
        - Diazepam 10 - 20 mg for the night, 5 - 10 mg x 1 - 3 orally or per rectum
        - Lorazepam 1 - 2 mg x 1 - 3, with drug always at hand when needed
    - If necessary, start antidepressive medication.
    - Agree upon emergency medication that can be taken in acute conditions, e.g. tracheal bleeding/compression
        - The patient is not left alone, everyone must stay calm
        - Diazepam 5 - 20 mg i.v. or 10 - 20 mg per rectum ± morphine 10 - 20 mg i.v., if necessary, repeating the dose until the patient becomes unconscious.
- Non-pharmacological management of dyspnoea
    - A patient with dyspnoea is often very restless. Anxiety may aggravate dyspnoea. Explain to the patient the course of the disease and teach how to act in acute situations.
    - Discuss the fear of suffocation: "In these situations, some of my patients have been afraid of suffocating."
    - Suffocation caused by cancer is very rare (tracheal obstruction or bleeding caused by a tumour in the head and neck region).
    - If dyspnoea continues to be severe despite treatment, you can decide with the patient and his family to keep the level of consciousness so low that the patient need not suffer from the feeling of suffocation (e.g. diazepam/lorazepam-haloperidol-morphine infusion).

    - Physiotherapy, relaxation exercises
    - Physical strain depending on functional capacity
    - Oxygen, if hypoxaemia if obvious and correction is beneficial
    - Plan of action for attacks of dyspnoea
        - Pre-planned drugs readily available, e.g. in the pocket, on the night table
        - Half-sitting resting position, calm breathing, window open, etc.
        - How to call for help: wrist band alarm, bell, phone (telephone number must be clearly written clearly and readily at hand!)

Dry mouth and stomatitis

- See also article on dry mouth (See related EBM Guideline: **Dryness of the mouth** available on the EBM Web site).

Dentist

- Helps with the cleaning of the mouth and with dental repairs. Gives instructions on the use of fluorine.

Cleaning the mouth

- Soft toothbrush
- No strong mouth rinses or toothpastes
- Well-fitted prostheses that are cleaned twice daily and not worn at nights.
- Frequent mouth rinsing and gargling
- Water
- Saline solution (1 tsp of salt in 2 dL of water)
- Salt-sodium bicarbonate solution (1 tsp of salt + 1 tsp of sodium bicarbonate in 2 dL of water)
- Chlordexidine diluted 1:4

Eating

- Lukewarm, mildly spiced soft foods.
- Nothing very cold or hot.

Treatment of candida and herpes infections

- Candida is the most common cause of infection.
- Local therapy:
    - Miconazole gel 2% 2.5 mL x 4
    - Natamycin drops 1 mL x 4
    - Nystatin drops 1 mL x 4 for 2 - 4 weeks
    - Amfotericin B tablet 1 x 4 (severely dry mouth)
- In severe candida stomatitis give fluconazole systemically
- Herpes infection:
    - Valaciclovir 500 mg x 2 for 5 days

Treatment of pain

- Local therapy:
    - Licocaine mouth rinse 15 mL for gargling + 15 mL swallowed x 1 - 8
    - Lidocaine mixture (20 mg/mL) 5 - 10 mL first gargled and swallowed slowly x 1 - 6 (note allergy and danger of aspiration)
    - Sucralfate first gargled and then swallowed 200 mg/mL x 4 - 6 (if this induces vomiting, the patient should not swallow the dose) may reduce the need for analgesics.
    - Pain is managed by the principles of gradual pain relief (See related EBM Guideline: **Pharmacological treatment of cancer pain** available on the EBM Web site)

Anorexia

- This section deals with causes of anorexia, some of which can be treated. It is normal for a patient who is approaching the end of life to lose interest in eating and drinking. Knowing that loss of appetite is a common problem as the disease progresses may help the patient and family members to give up a compulsory search for suitable foods.
- There is no clear evidence of the correlation of fluid status and the presence of thirst (Level of Evidence = C; Evidence Summary available on the EBM Web site).
- Medication, such as antineoplastic agents, interferon, analgesics.
- Oral Candida infection (common); sore or dry mouth; see article on the treatment of a stomatitis and dry mouth (See related EBM Guideline: **Dryness of the mouth** available on the EBM Web site).
- Nausea and vomiting, see section on the treatment of nausea.
- Early feeling of satiety, which may be caused by
    - Constipation
    - Abdominal tumour or large liver (prednisolone 20 - 40 mg x 1 or dexamethasone 3 - 6 mg x 1)
    - Ascites (puncture, diuretics)
    - Half-sitting position, small portions, metoclopramide 10 - 20 mg x 3 - 4 given 20 minutes before a meal.
- Metabolic causes, e.g. hypercalcaemia, uraemia
- Pain (pain medication), depression (comforting, medication)
- Unpleasant surroundings for eating
    - Cold food (ice cream etc.)
    - Small portions on small plates. Pleasantly set meals at short intervals when the patient wishes. A smell-free place for eating.
    - Shared meals by the table dressed up instead of eating in the bed wearing nightwear.
    - An aperitif improves appetite.
- Corticosteroids may improve appetite, e.g. dexamethasone 3 - 6 mg x 1 or prednisolone 10 - 20 mg x 1.

Nausea and vomiting; causes and treatment alternatives

- Constipation is a common and curable cause of nausea; see section on treatment below.
- Hypercalcaemia: fluids, bisphosphonates, steroid (See related EBM Guideline: **Hypercalcaemia and hyperparathyroidism** available on the EBM Web site).
- Brain metastases: dexamethasone 3 - 10 mg x 1 - 3 with dose tapering, whole-brain or

stereotactic radiation.
- Enlarged liver, ascites: steroid, ascites pucture.
- Uraemia, liver failure: symptomatic treatment.
- Oesophagitis, gastritis (See related EBM Guideline: **Treatment of dyspepsia, reflux oesophagitis and peptic ulcer** available on the EBM Web site).
- Anxiety, fear, depression
    - Appropriate treatment of nausea, psychological support and anxiolytic medication, when necessary.
- Cough resulting in vomiting: see section on treatment of cough above.
- Drugs: antineoplastic agents, opioids (nausea caused by opioids seldom lasts more than a week), digoxin (concentration), NSAIDs
    - Stop unnecessary drugs, change the drug, and check dosage.

- Symptomatic medication at suggestive doses

    - Metoclopramide 10 mg 1 - 2 tablets x 3 - 4 times daily p.o./p.r./i.v.
    - Haloperidol 1 - 2 mg for the night, 0.5 - 1 mg x 1 - 3, 5 - 10 mg daily s.c./i.v.
    - Lorazepam 0.5 - 2 mg x 1 - 3, 2 - 4 mg/day s.c./i.v.
    - Dexamethasone 3 - 9 mg x 1, prednisolone 20 - 60 mg x 1
    - Cyclizine 50 mg x 1, hydroxyzine 20 mg for the night
    - Above drugs in combinations.

Constipation

- Constipation is a very common symptom in a patient with advanced cancer. It is associated either with the disease itself, changes in diet, reduction of exercise, drugs, lack of intimacy in the hospital or a combination of these factors.
- Constipation is an intimate complaint: ask actively about it and inform the patient.
- In the beginning of treatment, auscultate abdominal sounds, palpate the stomach and confirm/exclude blockage of the rectum by touch per rectum.
- Start prophylactic medication for constipation when opioids are initiated!
    - Encourage physical activity (treat pain that prevents it)
    - Ample amounts of fluids, juices
    - Medication, e.g. lactulose 15 - 30 mL x 1 and/or sodium picosulphate 10 - 25 drops x 1 (doses are suggestive)
    - If necessary, bowel movement is induced by giving an enema.
    - No bulk laxatives for a patient in poor condition.

Diarrhoea

- Antineoplastic drugs are the most common cause of diarrhoea in cancer patients.
- After an operation of the intestines: nutritional advice.
- Carcinoid syndrome: causative and symptomatic treatment.
- Stool culture in prolonged diarrhoea, particularly after a course of antibiotics.
- In the terminal stage of cancer long-lasting constipation often causes "overflow" diarrhoea.
- Treat symptomatically by giving
    - Charcoal tablets
    - Loperamide 4 mg starting dose, and 2 mg after each diarrhoeic voiding up to 16 mg/day.

    - Morphine solution 12 - 20 mg or oxycodone solution 9 - 15 mg 1 x 6
    - Long-acting morphine 10 - 30 mg x 2 or oxycodone 20 mg x 2
    - Morphine or oxycodone; starting doses 6 - 10 mg x 4 - 6 s.c.
    - Some centres have used octreotide in treatment-resistant cases 25 - 100 µg x 1 - 3 s.c.

Intestinal obstruction

- Consult a surgeon if the patient´s condition allows any surgical interventions.
- Inoperable obstruction:
    - Discontinuation of food intake, intravenous hydration and nasogastric suction are indicated only in preparation for an operation.
    - When the obstruction is located proximally in the gastrointestinal tract vomiting occurs rapidly after food or drug ingestion; in a distal obstruction oral medication may be successful.
    - Nausea, vomiting, colic pain
        - Haloperdol 1 - 2 mg x 3 daily p.o., or subcutaneous infusion of 5 - 10 mg/day
        - Chlorpromazine 10 - 25 mg x 3 daily p.o.
        - Morphine 10 - 30 mg x 2 p.o., or a 30 - 60 mg/day s.c. infusion, starting doses.
        - Glycopyrrolate 0.2 mg x 1 - 6 or 0.6 - 1.2 mg/day as a continuous s.c. infusion
        - Some centres have used octreotide in treatment resistant cases at 25 - 100 µg x 1-3 s.c. (Level of Evidence = C; Evidence Summary available on the EBM Web site).
    - Discuss the pros and cons of the nasogastric tube with your patient.

Hiccup

- Caused by irritation of the phrenic nerve or the diaphragm (tumour, distention of the ventricle, enlarged liver, diaphragmatic hernia, ascites), brain tumour, uraemia.
- Acute attack: the patient can sit up, breathe into a paper bag, drink two glasses of water, swallow two tsps of sugar.
- Metoclopramide 10 - 20 mg x 3 - 4 daily p.o./p.r. or parenterally.
- Haloperidol 0.5 - 2 mg x 1 - 3 daily p.o., or 2.5 - 5 mg i.m.
- Chlorpromazine 25 - 50 mg x 1 - 3 daily p.o (may cause sedation. If the cause is a brain tumour: epileptic medication.

Ulcerations caused by skin metastases

Treatment

- Radiotherapy
- If the ulcer is purulent, showering x 2 - often, sodium chloride bandages.
- Foul smell, infection
    - Showering and antiseptic bandage
    - Adsorbing activated charcoal bandages reduce smell.
    - Antibiotics; drugs against anaerobes, e.g. metronidazole
    - Bad smell in the room can be reduced, for example, by lemon slices, a scented candle.
- Treatment resistant focal ulcer: consult a (plastic) surgeon.

Pruritus; causes and treatment alternatives

- Skin diseases: treatment of the basic disease.
- Allergic reactions: stopping or changing medication, treatment of allergic reaction.
- Morphine is a rare but possible cause of itching: change to oxycodone or fentanyl.
- Uraemia: (symptomatic) treatment of uraemia
- Pruritus caused by skin metastases; radiation therapy
- Polycythaemia vera: causative treatment, low-dose ASA, note bleeding complications.
- Cancer-induced cholestasis
    - In extrahepatic cholestasis bile acids can be drained, in some cases radiotherapy may be an option
    - Prednisolone 20 - 80 mg x 1 or dexamethasone 3 - 10 mg 1 - 2 with dose tapering
    - Good skin care, see below
    - Symptomatic medication, with sedation as the main benefit. In some cases night-time dosing is sufficient
        - Benzodiazepines, e.g. lorazepam 0.5 - 2 mg x 1 - 3, 2 - 4 mg/day s.c./i.v.
        - Antihistamines (especially sedative ones), such as hydroxyzine 10 - 25 mg x 1 - 3.
        - Haloperidol 1 - 2 mg x 1 p.o. or 5 - 10 mg/day as a s.c. infusion
        - Chlorpromazine 25 - 50 mg x 1 - 3 p.o.
        - Opioids, e.g. long-acting morphine 10 - 30 mg x 2, oxycodone 2 mg x 2, starting doses
        - Cholestyramine binds bile acids, suggested dose is 4 g x 4 daily p.o.; rarely applicable in practice.
- Skin care: the most common cause of pruritus is dryness of the skin. Skin care is a central form of treating the itching regardless of its aetiology.
    - Dryness aggravates pruritus. The greasier the ointment is the longer is the effect. Less greasy creams may feel more pleasant: apply more often. Soap should be avoided, and an emulsion cream is applied to the skin before a bath/shower or oil is added to the bath water. Dry the skin patting lightly.
    - Cooling menthol ointments can be used as skin cream.
    - Menthol-alcohol solutions are available in pharmacies.
    - Heat, anxiety and boredom make pruritus worse.
    - Cotton gloves for the night, short nails to prevent scratching, light cotton clothing.

Palliative radiotherapy

- Indications
    - Bone pain that does not respond to therapy: at least partial palliation is achieved in about two thirds of patients and total relief on pain in about half.
    - Prevention of fractures of the weight-bearing bones if the risk of fracture is already present (more than half of the cortex is destroyed or there is a larger than 2 - 3 cm lytic metastasis in the diaphysis). Always consult first a surgeon.
    - Treatment of medulla compression; NB: if the patient already has para- or tetraparesis radiotherapy should be given as an emergency treatment. The neurological status of the patient at the time the therapy is started determines the outcome. Start steroids: see instructions below.
    - Managing pressure symptoms: e.g. brain metastases, nerve compression
    - Haemorrhage: haemoptysis, haematuria

    - Treatment of skin metastases
    - Solving obstructions (bronchus, vena cava superior, ureter)
- If pressure symptoms occur in the beginning of the treatment, or if they are to be expected during therapy, start a steroid, e.g. dexamethasone 3 - 10 mg x 1 - 3 p.o. or parenterally (some centres use doses up to 100 mg daily in medulla compression (Level of Evidence = A; Evidence Summary available on the EBM Web site).
- The aim is to resolve the condition quickly with as few adverse effects as possible.
- Treatment is repeated 1 - 10 times.

Related evidence

- There is not enough evidence to recommend certain models of palliative care (e.g. home care or hospital care). Home care may have some advantages (Level of Evidence = C; Evidence Summary available on the EBM Web site).
- Nutritional support for patients with cancer has not been shown to improve prognosis (Level of Evidence = C; Evidence Summary available on the EBM Web site).

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Article ID: P16092 (016.011)